Program:

11.00 The International Ecosystem of Big Science (Leonardo Biagioni, F4E/ITER)
11.30 Technological and scientific challenges for ITER (Tony Donné, F4E)
12.00 The developments around the Einstein Telescope (Jo van den Brand, Uni Maastricht/Nikhef)

12.30 Lunch

13.30 Connecting science and industry in astronomical research (Marco de Vos, ASTRON)
14.00 Future developments for interferometry and Big Data (Michael Wise, SRON)
14.30 The value of Big Science from an industry perspective (Hans Priem, VDL-ETG)

15.00 Break

15.30 Forum of experts and policy makers fueled by questions from the speakers

16.30-17.30 Reception and drinks

Jan Geralt
Bij de Vaate

Head of Instrument Science

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National Institute for Space Research

- *Lead NL participation in the ESA science program*
- *National expertise center for NL research community*
- *Perform world-leading research with NL universities*
- *Develop technology and instrumentation with NL industry*
- *Advise government on space policy and strategy*

Staff and Locations

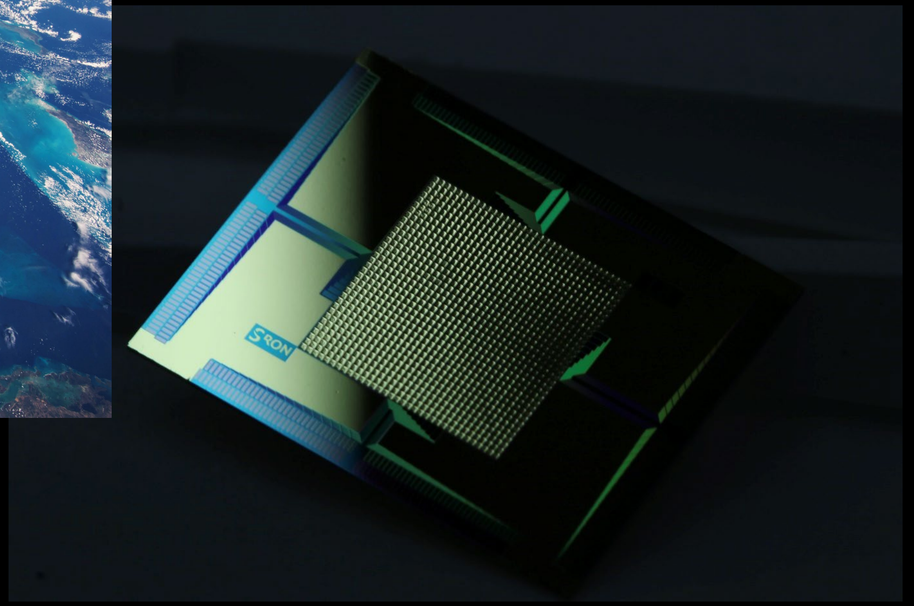
- One Institute, two locations, ~190 staff (~140 Leiden, ~50 Groningen)
- Scientists/Instrument Scientists (50%), Engineers (30%), Staff and support (20%)

SRON Research Themes

Astrophysics and Exoplanets

Earth Observation and Climate Studies

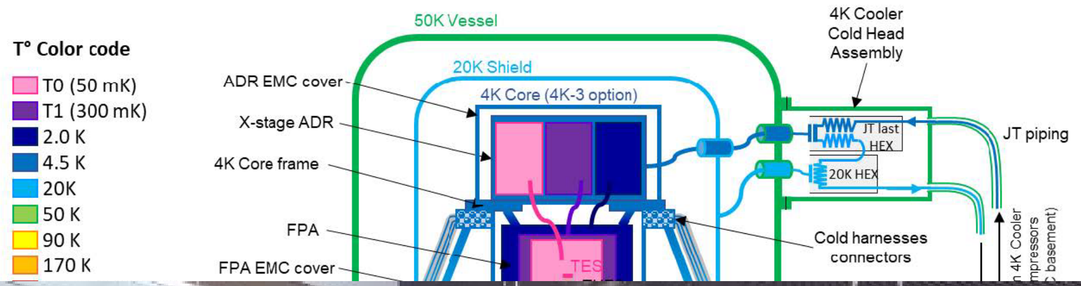
Technology and Instrumentation

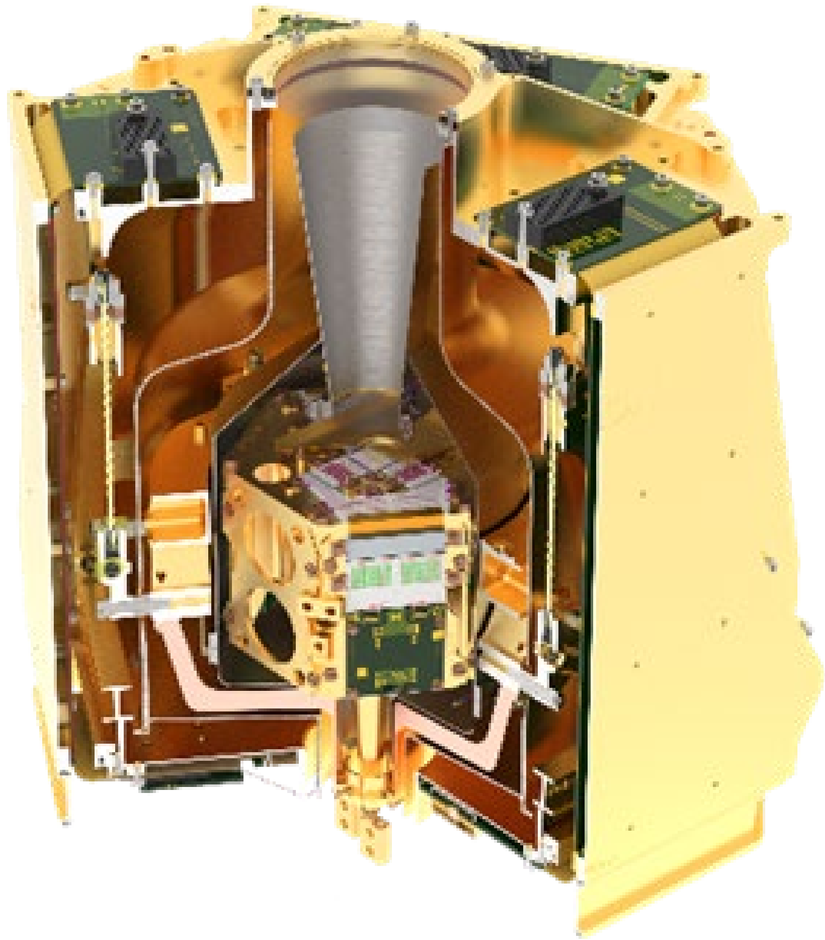



JWST

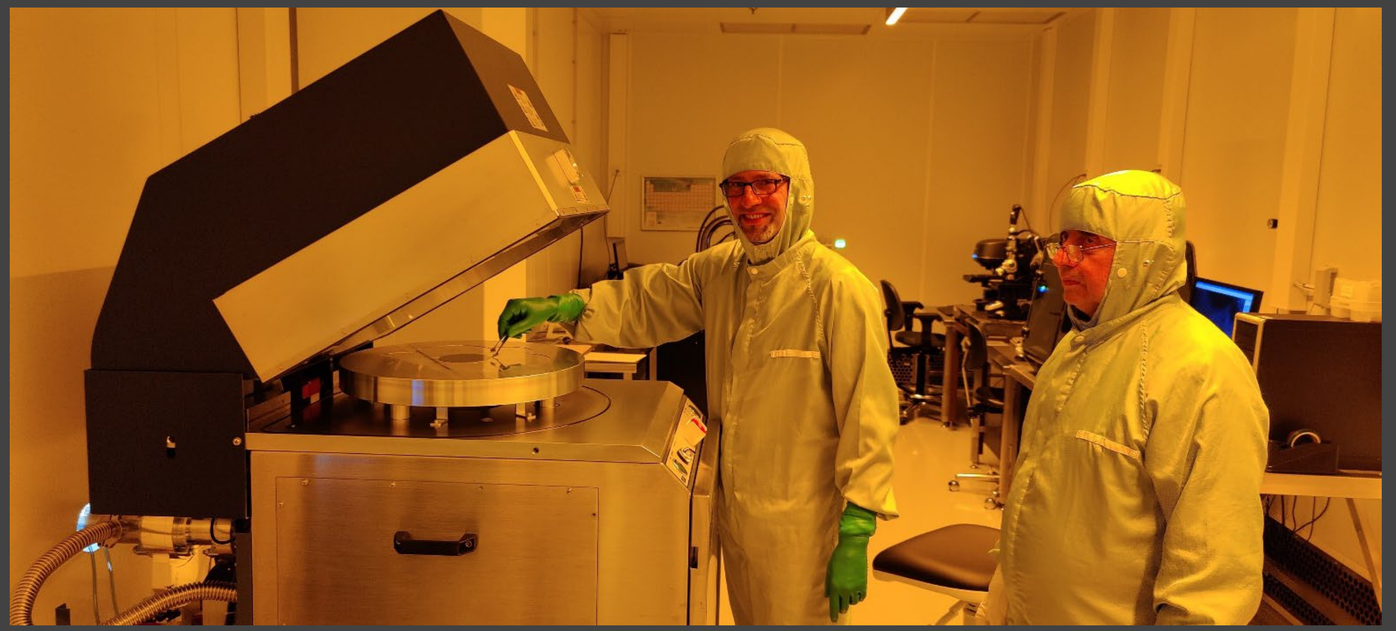

PLATO

Athena, an X-ray mission





The SRON clean room

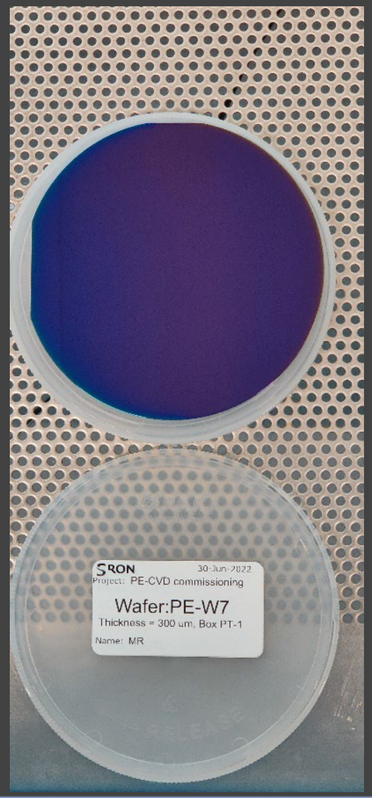


PE-CVD (SiO2, Si3N4, a-Si, SiC)
- Etch masks
- Isolators, optical layers
- Dielectric layer for LC filters

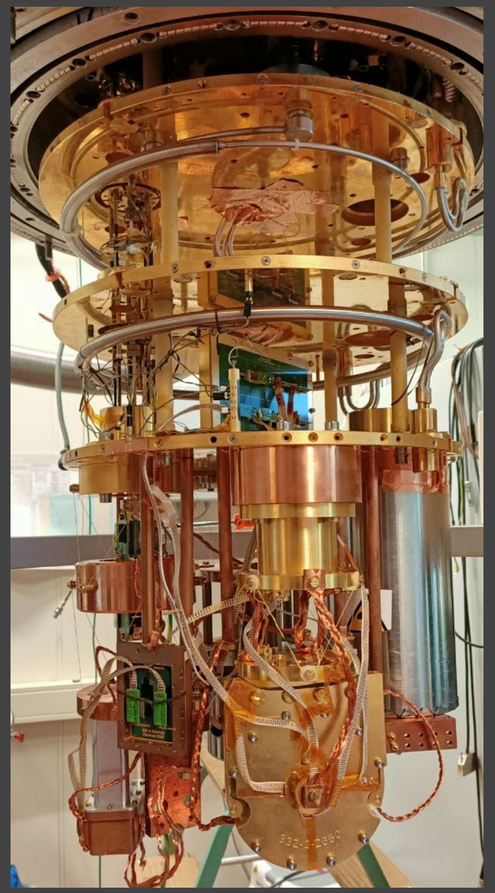
100 mm & 150 mm wafers

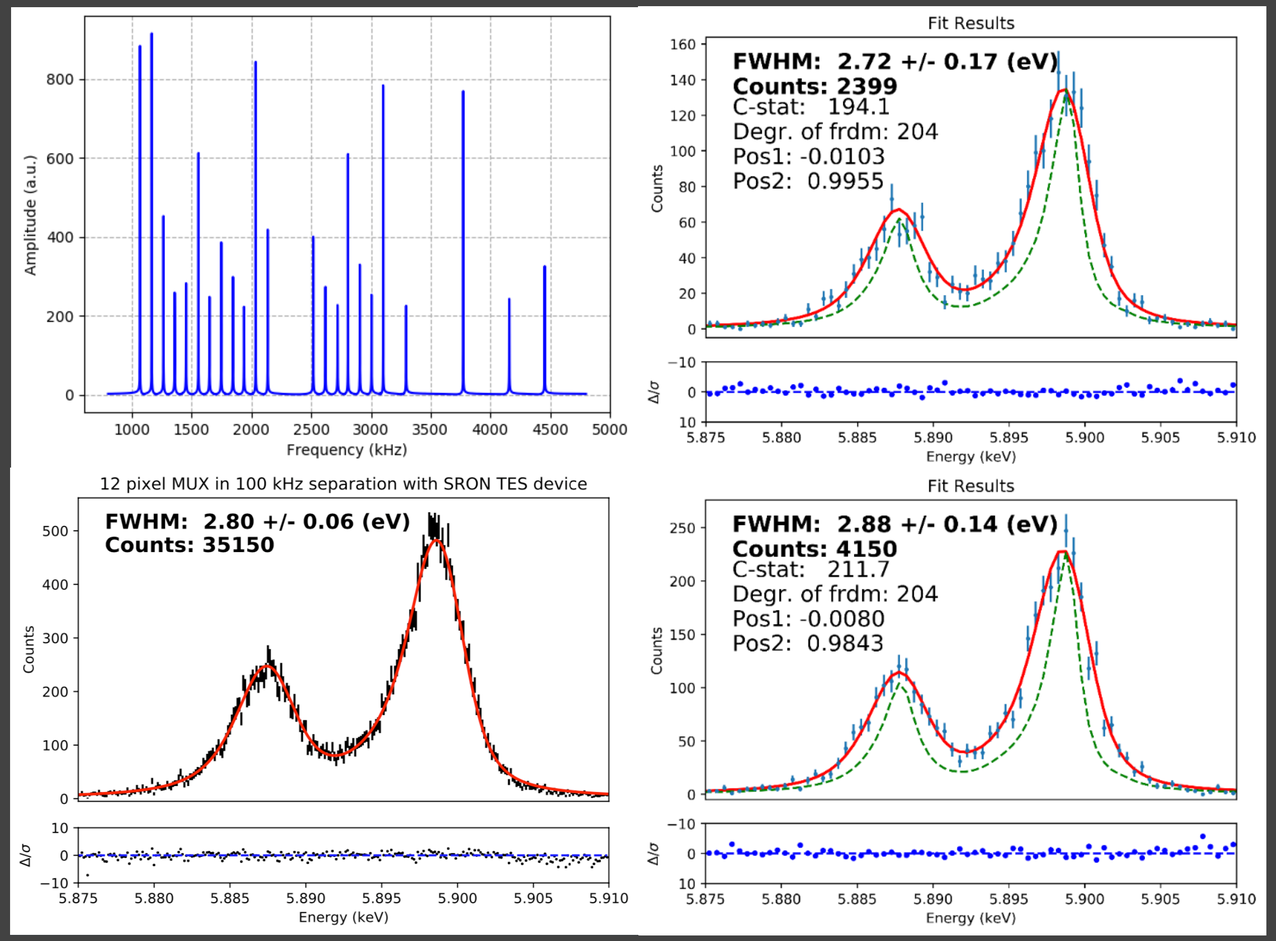
- New technique for SRON
- Process commissioning going

- SiO2 properties & uniformity OK
- Si3N4, a-Si in progress

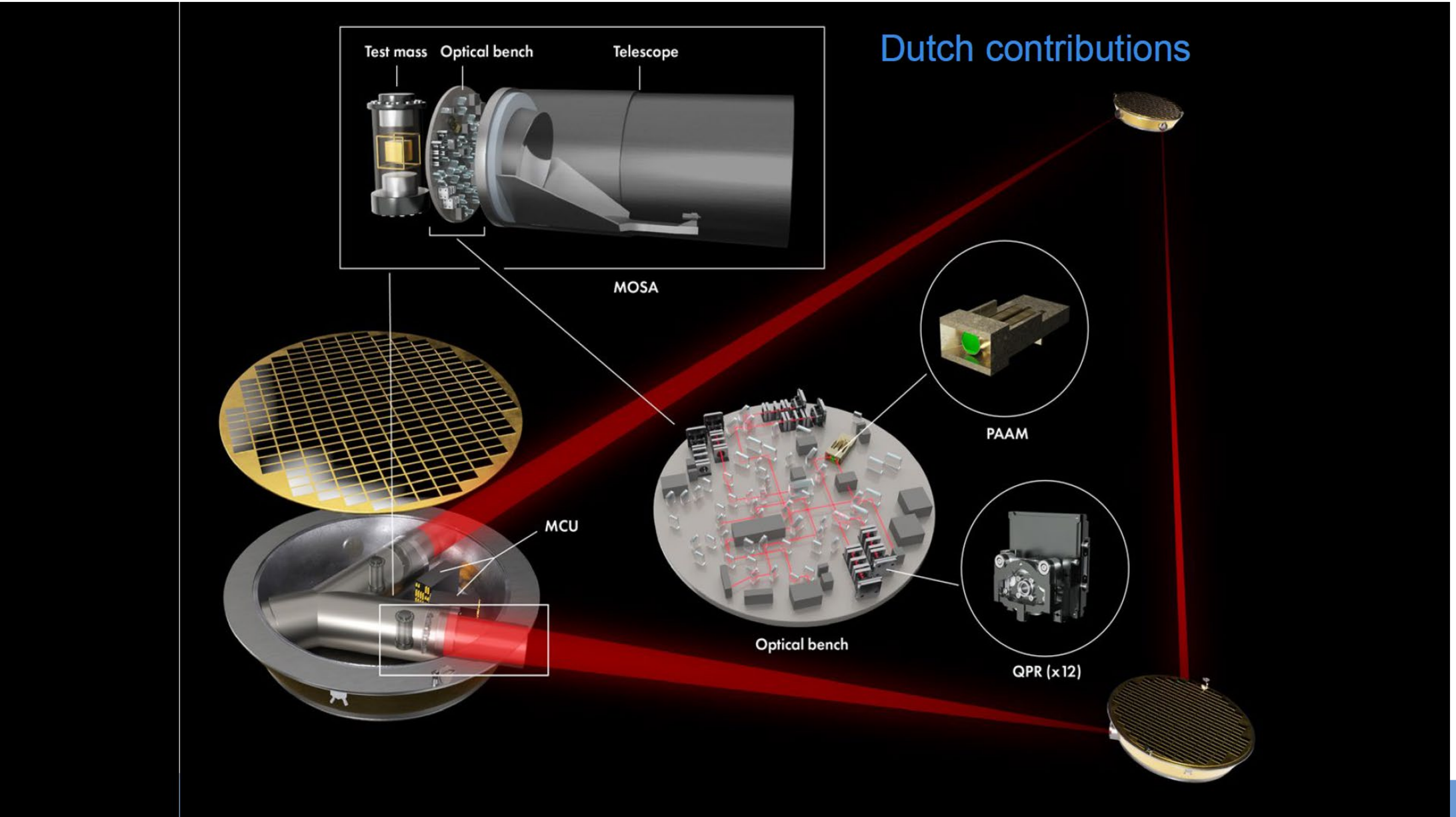


FDM Read out for X-ray TES micro-calorimeters



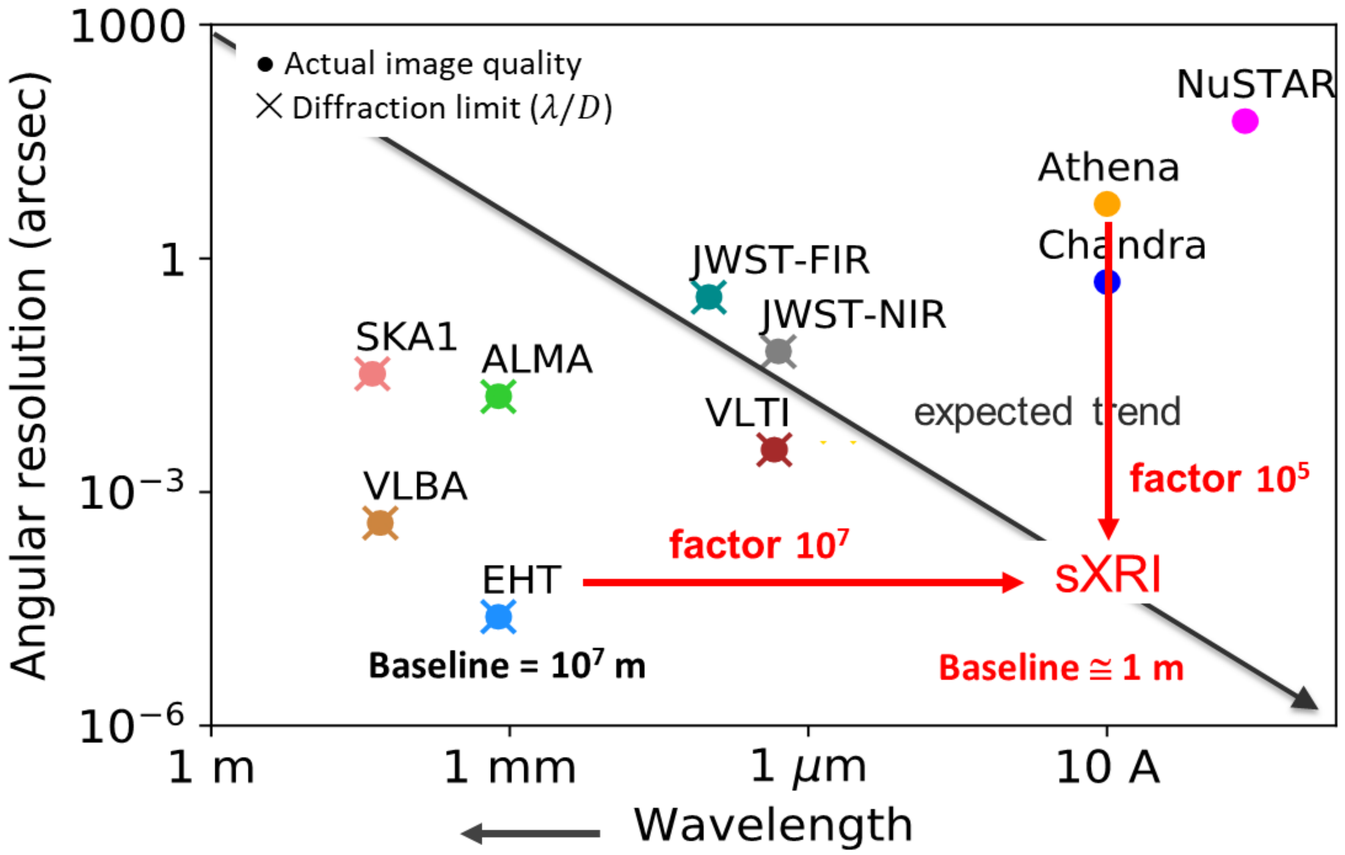


LISA, gravitational wave detection

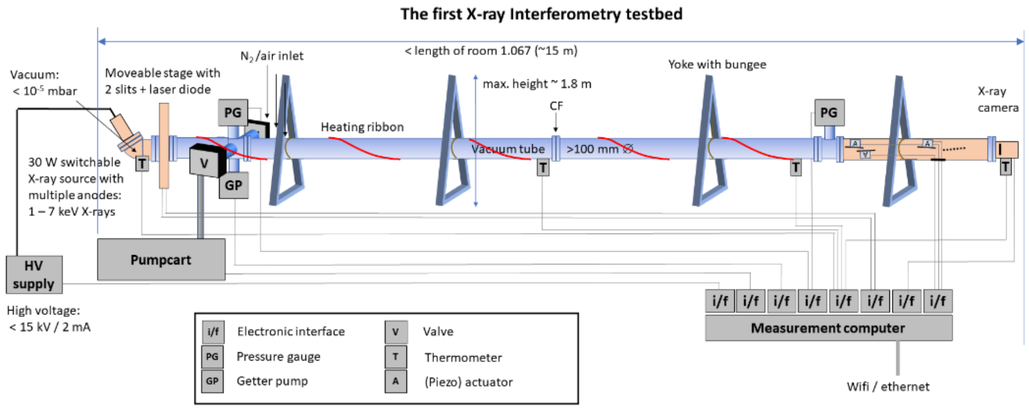


Technology: Interferometry

To achieve superb resolution in Rontgen domain: λ/D



Our long-term goal is to develop a single s/c X-ray telescope with a spatial resolution of 50 – 100 μas.



Coming up

- XRISM, launched in September 2023, Japan
- GUSTO, balloon FIR mission, launch in December 2023, Antartics
- PACE, launch in spring 2024, USA